Module 8 Lesson Plan

Vehicle Control in Limited Spaces



Content

Essential Knowledge and Skills 16—17

- Making Turnabouts
 - ♦ Mid-Block U-Turn
 - ♦ Two-Point Turnabout—Backing to the Right
 - ♦ Two-Point Turnabout—Backing to the Left
 - ♦ Three-Point Turnabout
- Parking
 - ♦ Angle Parking
 - Perpendicular Parking
 - ♦ Parallel Parking
 - ♦ Curb or Street Parking
 - ♦ Hill Parking
 - ♦ Additional Parking Strategies and Locations
- Assignment
- Assessment



M8—Vehicle Control in Limited Spaces



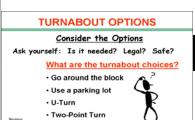
Lesson Objective: The student understands the legal requirements and reduced risk procedures leading to good habits for turning a vehicle around to go in the opposite direction, parking maneuvers, and using proper vision control, motion control and steering control to conduct limited space maneuvers.

Instructional Topic	Content	Slide
MAKING TURNABOUTS	Limited space driving conditions require slow speeds, quick steering inputs, and an awareness of what and who is around the vehicle	
	Introduce, model, practice, and discuss When driving, there are times when the need arises to turn the vehicle around to go in the opposite direction such as: • Missing an address • Passing the intersection where a turn was needed • Some turn around maneuvers are more risky than others	T8-1
◆ Turnabout Options	 To go in the opposite direction, consider the options: Is a turnabout needed? Is it legal? Is it safe? Consider turnabout choices: Go around the block Use a parking lot U-turn Two-point turn: backing into a driveway on the right or turning into a driveway on the left Three-point turn A turnabout procedure is an option when driving around the block is not possible Some turnabouts are a high-risk maneuver when the maneuver requires drivers to cross or back into traffic Determine the amount of traffic, the width of the roadway, and the number of lanes Is there an unobstructed LOS/POT? Evaluate the risk 	T8-2

Resources







• Three-Point Turn

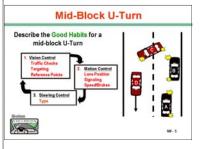
Instructional Topic	Content	Slide
◆ Turnabout Restrictions	 A clear Line of Sight (LOS) and safe Path of Travel (POT) must be available Montana law does not permit a driver to turn the vehicle around to go in the opposite direction unless it can be made safely and without interfering with other traffic Montana law restricts turnabouts: in a curve upon the approach to or near the crest of a grade where the vehicle cannot be seen by the driver of any other vehicle approaching from either direction within five hundred (500) feet in a No-Passing Zone 	T8-3
MID BLOCK U-TURN Good Habits For a Mid-	 Introduce, model, practice, and discuss A mid-block U-turn is safer than an intersection U-turn because traffic can appear from multiple directions while in an intersection Some towns post signs for U-turns at intersections only When choosing a location to make a turnabout, consider the width of the street and the volume of traffic The width of the road must be sufficient to accommodate the turning radius of the vehicle Drivers need to be aware of the turning radius of their vehicle A mid-block U-turn should be performed in a low volume traffic area with no legal restriction for performing the maneuver Good habits using vision, motion, and steering control include Check traffic ahead and to the rear 	T8-4
Block U-Turn	 Ensure clear visibility for 500 feet in both directions Signal right and move to the right edge of the road and stop in LP3, with the right side tires 3-6 inches from the side of the roadway or curb Signal left, check traffic again, allow a 20-30 second gap in traffic to complete the maneuver, especially if unsure of the turning radius of the vehicle 	T8-5

Resources



Drivers may not turn the vehicle around unless it can be done safely and without interfering with other traffic Turnabouts are restricted when in a curve approaching or near a hill where you can't see 500 feet in either direction in a No Passing Zone





Instructional Topic	Content	Slide
Good Habits For a Mid- Block U-Turn (Cont.)	 Turn head and look to new target area Turn the wheel rapidly to the left, while moving slowly to the other side of the road Turning the wheel while the vehicle is stopped is hard on the tires, often referred to as "dry steering" Do not stop if enough room is available to turn completely around in one continuous movement (keep wheels turned until vehicle is aligned with new target area) Accelerate into the new target area, check mirrors Be sure signal cancelled Risky behaviors include:	T8-6
Behaviors For a Mid-Block U-Turn	 Failure to see 500 feet in both directions Failure to signal Failure to check traffic before turning left Failure to select a safe gap Speed too fast or too slow Turning the wheel too slowly Failure to turn head and look to new target area Stopping unnecessarily 	
TWO-POINT TURNABOUT BACKING TO THE RIGHT	 Introduce, model, practice, and discuss When going around the block or using a parking lot is not an option, a two-point turnabout is the safest maneuver from the right side of the road A two-point turnabout should be used in a low-volume area, with no legal restriction for performing the maneuver in a driveway or street The advantage of this maneuver is being able to reenter traffic by driving forward 	T8-7

Resources





- Failing to Signal
 - Failing to check traffic
 - Failing to get a safe gapFailing to turn head, look
 - to new target
 - Speed too fast or too slow
 - Stopping unnecessarily

M 8

Two-Point Turnabout – Backing to the Right

Use this maneuver in a low-volume area with no legal restrictions for using a driveway or street

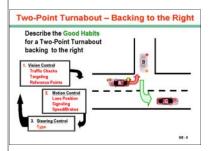
Advantage: drivers are able to reenter traffic by driving forward

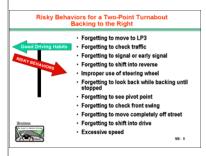
This is the <u>safest</u> maneuver from the right side of the road

Instructional Topic	Content	Slide
Good Habits for a Two- Point Turn- about by Backing Right into a Driveway or Street	 Good habits using vision, motion, and steering control include: Check rear traffic, signal right after passing a driveway or intersection to avoid confusing other drivers Move to the curb, LP3 Stop in LP3, wheels straight, rear bumper just beyond the driveway or intersection Check traffic, be able to see 500 feet in either direction Shift to reverse, cover the brake Some acceleration may be required due to road condition (crowned, dips in the intersections or driveway) Look to the rear and slowly back up to pivot point (the corner support post of the rear window of the vehicle appears to conceal the curb line of the driveway, or street, into which the vehicle is backing While looking back, use hand-over-hand steering to turn right into the driveway or street Check the front swing of the vehicle because it will move farther than the rear! To reduce risk, back the shortest distance possible to accomplish the maneuver Stop with the wheels straight when the vehicle is even with the curb line (safety stop position) With foot on the brake, shift to drive (or 1st gear) and signal left Check traffic When safe, turn left into the new target area Check rear zone 	T8-8
Risky Behaviors When Making a Two-Point Turnabout by Backing Right into a Driveway or	 Risky behaviors include: Failure to move to LP3 Failure to check zones for traffic Failure to signal or signaling too soon, confusing other drivers Failure to shift into reverse Improper use of the steering wheel Failure to look back while backing until stopped Failure to recognize pivot point for turning Failure to check front end swing Failure to move completely off the street Forgetting to shift into drive Excessive speed 	T8-9

Resources



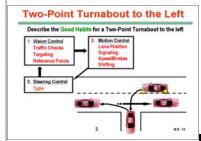




Instructional Topic	Content	Slide
TWO-POINT TURNABOUT BACKING TO THE LEFT	 Introduce, model, practice, and discuss A two-point turnabout to the left is riskier since it requires backing into traffic Select a driveway or road where the maneuver is legal Choose a location with a clear view in both directions Backing must be safe and without interfering with traffic 	
Good Habits For a Two-Point Turnabout by Backing Left into a Drive- way or Street	 Good habits using vision, motion, and steering control include: Select a location without line of sight restrictions Check traffic and pedestrians, signal left and move to LP2 Select a safe gap for your left turn Turn left into the driveway or roadway, stop in LP 3 when the rear of the vehicle clears the street (use rear limit reference point) Check for traffic again, be able to see 500 feet in either direction Signal right Shift to reverse Look back to the right rear and side, back slowly toward the target area When the rear window corner support post appears to conceal the curb line of the lane into which the vehicle is backing into (pivot point) begin turning sharply into the new lane at a slow speed Some acceleration may be required depending on the type of road edge (gutter depth, crown, etc.) Check the front swing of the vehicle as the turn is made while backing To reduce risk, back the shortest distance possible to accomplish the maneuver Stop with the wheels straight With foot on the brake, shift to drive (or 1st gear) and accelerate toward the target area 	T8-10
Risky Behaviors When Making a Two-Point Turnabout by Backing Left into a Driveway	 Check rear zone Risky behaviors include: Failure to check traffic, see 500 feet, get a safe gap Failure to signal Failure to move completely off the street 	T8-11

Resources





M 8

Progetting to check for clear LOS location - Forgetting to check for clear LOS location - Forgetting to check traffic, get safe gap - Forgetting to signal, turning too slow - Failure to move completely off the road - Forgetting to shift into reverse, look back until stopped - Insufficient, or too much wheel turning - Excessive speed - Failing to stay in lane - Forgetting to shift into Drive

Instructional Topic Content Slide Risky Failure to shift into reverse Behaviors Failure to look back while backing until stopped When · Failure to turn wheel quickly while moving slowly Making a Two-Point Excessive speed Turnabout by • Failure to stay in proper lane **Backing Left** Forgetting to shift into drive into a Driveway or Street (Cont.) T8-12 **THREE-POINT** Introduce, model, practice, and discuss **TURNABOUT** Three-point turnabouts are the most hazardous turnabouts to make, but can be performed in the least amount of space Three-point turnabouts are an option if a driveway is not available, if traffic is light, if driving around the block is not an option, or the available space prevents a U-turn T8-13 Good habits using vision, motion, and steering control include **Good Habits** Check traffic ahead and to the rear for a Three-Point • Be able to see 500 feet in either direction Turnabout Select at least a 20-30 second gap Check mirrors, signal right and move to the right edge of the road (LP3) and stop Signal left, check traffic again Turn head, look to the target area while turning Use hand-over-hand steering ... turn the wheel rapidly to the left, while moving slowly to the other side of the ... use reference points to stop when the front of the vehicle is close to the edge of the curb or roadway Shift to reverse Check traffic, look back and turn wheels quickly all the way to the right while backing up slowly ... Turn signal will cancel when the steering wheel is turned sufficiently Look back until stopped Use quick glances for changes in the other zones Back only as far as needed to complete the turn

Resources

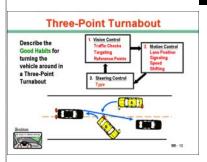


Three-Point Turnabout The most hazardous turnabout

Consider if:

- · a driveway/street is not available
- driving around the block is not an option
- available space is insufficient for another type of turnabout





Instructional Topic Content Slide Good · Shift to drive **Habits** ... Repeat the above procedure if the vehicle is exceptionally long or the For a roadway is very narrow Three-Point · Check traffic Turnabout (Cont.) Look to target area · Accelerate into the new target area, check rear zone · Be sure turn signal is cancelled Risky Risky behaviors include: T8-14 Behaviors Failure to signal when moving right to the curb When Failure to check traffic Making a Failure to select sufficient gap Three-Point Failure to signal left to initiate the turn Turnabout Speed too fast or too slow Failure to look back while the vehicle is moving back • Turning steering wheel too slowly, resulting in insufficient steering Hitting the curb or dropping tires off roadway Forgetting to shift into reverse Forgetting to shift into "drive" Completing the maneuver too slowly • Failure to use reference points to maximize road space for turnabout Introduce, model, practice, and discuss **PARKING** Parking a vehicle requires speed control, steering control, visual control and accurate space judgment

Resources





Instructional Topic	Content	Slide
◆ Parking Strategies	Parking is easier and safer if the following strategies are used: Look for a parking space with enough room for entering and exiting easily Observe and follow all signs and laws Be aware of other vehicles exiting their parking space Avoid spaces at the end of parking lanes where being hit is more likely Avoid spaces near a large vehicle that may block the LOS Avoid spaces with a poorly parked vehicle on either side	T8-15
	accurate judgment of space Leaving a parking space is easier and safer when following these good habits: Search for traffic and pedestrians Communicate with other drivers by signaling When it is safe to move, move slowly Be aware of the swing of the front or rear of the vehicle Gradually accelerate to driving speed Check rear zone	T8-16
◆ Parking Laws	 Parking is not permitted: On sidewalks On the street side of any parked vehicle (this is known as "double parking") In intersections Within 50 feet of railroad tracks On bridges or overpasses In front of a driveway Within 15 feet of a fire hydrant Within 20 feet of a crosswalk Within 30 feet of a stop sign, yield sign, or traffic signal Within 20 feet of a fire station driveway On any controlled-access highway (freeway) Where prohibited by signs or a red, yellow, or white "no parking" curb In a handicapped parking area unless you have been given a handicap license plate or special card 	T8-17

Student Learning Activities Resources



Parking Strategies

Parking is easier and safer if the following strategies are used:

- Look for a parking space with enough room for entering and exiting easily
- Observe and follow all signs and laws
- Be aware of other vehicles exiting parking spaces
- Avoid spaces at the end of parking lanes where being hit
- Avoid spaces near a large vehicle that may block the LOS
- Avoid spaces with a poorly parked vehicle on either side



* Turn head before turning the wheel to the target area

Parking Strategies

Leaving a parking space requires speed control, steering control, and accurate judgment of space

- · Search for traffic and pedestrians
- Communicate by signaling
- Move slowly
- Be aware of front or rear swing of the vehicle
- Gradually accelerate to driving speed
- Check rear zone



M 8



- Within 50 feet of railroad tracks On bridges or overpasses
- In front of a driveway



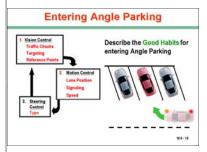
- Within 20 feet of a crosswalk
- On the street side of any parked vehicle known as "double parking"
 Within 30 feet of a stop sign, yield sign, or traffic signal
 - Within 20 feet of a fire station driveway
 - On any controlled-access highway (freeway)
 - In a handicapped parking area unless you have been given a handicap license plate or special card

Page 17

Instructional Topic Content Slide When outside a business or residential district drivers are not permitted to stop, **Parking** park or leave standing any vehicle, whether attended or unattended, upon the Laws roadway when space to stop, park or leave the vehicle off the roadway is (Cont.) available The width of the road opposite a parked vehicle must be free for other vehicles and leave a clear view of the stopped vehicle from a distance of two hundred (200) feet in each direction upon the highway The law does not apply to the driver of any vehicle which is disabled and temporarily leaving the vehicle on or near the roadway One-way street parking must be in the direction of traffic movement: Vehicles must park in the direction of traffic movement Vehicles must be stopped or parked with the wheels parallel to and within eighteen (18) inches of the curb or as close as practicable to the edge of the shoulder Introduce, model, practice, and discuss **ANGLE** Angle parking is most commonly found in parking lots, garages, and on some PARKING wide streets: The angle is typically about 30 degrees Spaces can be narrow, so speed control, steering control, and accurate judgment are essential Good Good habits using vision, motion, and steering control include: Habits for Search for anything in and around the parking space that will present a hazard Angle Is the vehicle in the space next to the desired space parked crooked? T8-18 **Parking** Are there pedestrians or animals nearby? Check for traffic Check and control the rear zone Communicate intentions by signaling at least 100 feet before parking and tapping the brake pedal to alert others Position vehicle at least 6-8 feet from the desired parking space Check blind spot in the direction of the parking space • See center (target) of the parking space without the line of sight cutting across the parking line Creep (move very slowly) and turn the wheel fast (hand-over-hand) toward target Straighten wheels and center vehicle in space Stop with front bumper even with the curb or parking line

Resources



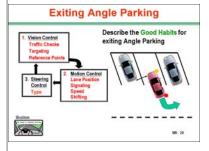


Instructional Topic	Content	Slide
◆ Good Habits for Angle Parking (Cont.)	Reference Point use when angle parked to left The curb or a line will appear to the rear of the left windshield corner post Reference Point use when angle parked to right The curb or a line will appear by the driver's side front corner post Shift to PARK or 1st gear Secure the vehicle with the parking brake	
Risky Behaviors When Entering Angle Parking	Risky behaviors include: Failure to check the rear zone Failure to signal Side position too close to parking space Speed too fast Steering insufficient or too slow Failure to target to center of the parking space Hitting curb due to incorrect forward reference point Failure to straighten wheels Parking too close to other vehicles Failure to set parking brake	T8-19
◆ Good Habits Exiting Angle Parking	 Good habits include: Search for traffic and pedestrians Communicate with other drivers and pedestrians by signaling for five seconds Shift to reverse and release the parking brake Look back (over shoulder, checking rear zones) and creep straight back. When exiting from a right side parking space, begin turning left when the vehicle's front bumper is even with the rear bumper of the parked car to the left – watch the front end swing! When exiting from a left side parking space, begin turning to the right when the vehicle's front bumper is even with the rear bumper of the parked car to the right – watch the front end swing! Back into the nearest lane, stop when vehicle is straight in the lane With wheels straight shift to drive Cancel signal, shift to drive Accelerate gradually and check rear zone 	T8-20

Resources







Instructional Topic Content Slide Risky Risky behaviors include: M8-21 Behaviors Failure to check the rear zone When Failure to signal Exiting Failure to shift to Reverse Angle • Failure to release parking brake Parking · Speed too fast • Steering too much, too little, too slow, too soon or too late · Failure to look back while the vehicle is moving Failure to check the front bumper swing Begins turning before bumper of the other vehicle is cleared Failure to straighten wheels after leaving parking space Failure to stop when the vehicle is straight Crosses into oncoming traffic while exiting • Exits by driving forward and entering the next lane in the wrong direction (in parking lots) Introduce, model, practice, and discuss PERPENDICLAR Perpendicular parking is most commonly found in parking lots, garages, and on **PARKING** some wide streets There are two types of perpendicular parking: Pulling in forward Backing in Spaces can be narrow, so speed control, steering control, and accurate judgment are essential

Resources





Instructional Topic	Content	Slide
Good Habits for Perpendicular Forward Parking	 Good habits using vision, motion, and steering control include: Communicate intentions by signaling at least 100 feet and tapping brakes Check rear zone when slowing Check zones for traffic and pedestrians Position vehicle at least eight feet from the parking space Be able to see to the center of the parking space Turn sharply when front bumper passes the left/right rear bumper of the vehicle to the right/left of the parking space Target to the center of the parking space Enter slowly checking front swing and rear fender for clearance Straighten wheels, center in space Stop at forward reference point Secure the vehicle with parking brake 	M8-22
Risky Behaviors When Perpendicular Forward Parking	Risky behaviors include: Failure to signal on approach to parking space Failure to get sufficient space for turning Failure to turn quickly on entrance to space Speed too fast Failure to target center of parking space Failure to check for rear bumper clearance Failure to straighten wheels Failure to stop at forward reference point and hits curb Parks too close to other vehicles Failure to set parking brake	M8-23

Resources



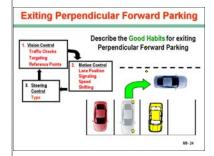




Instructional Topic	Content	Slide
◆ Good Habits Exiting Perpendicular Forward Park- ing	 Good habits include: Check for traffic and pedestrians Communicate with other drivers by signaling for five seconds Shift to reverse and release parking brake Look back (over shoulder, checking rear zones) while creeping straight back Creep back slowly, control speed with brake When front bumper is even with rear bumper of the vehicle on the left/right, begin to turn right/left Check clearances on both sides and continually check all rear zones Back into nearest lane Stop with wheels straight Shift to drive 	M8-24
Risky Behaviors When Exiting Perpendicular Forward Parking	Risky behaviors include: Failure to signal Forgets to shift into reverse Forgets to release the parking brake Failure to check traffic/pedestrians Failure to check bumper clearance Begins turning too soon or too late Failure to look back while backing, until stopped Stops in oncoming lane of traffic Speed too fast	M8-25

Resources







Instructional Topic	Content	Slide
◆ Backing into a Perpendicular Parking Space—-Advantages	Backing into a perpendicular parking space has advantages It is easier to get in and out of tight parking spaces It takes less time to park and pull out of the space Provides a better view when leaving the space Avoids backing out into traffic More likely to be let into the traffic flow by other drivers when exiting Reduced risk of hitting something or being hit Gives the best control and less stress	T8-26
—-Good Habits	 Good habits using vision, motion, and steering control include: Communicate intentions by signaling 100 feet and tapping brake Check rear zone Check for traffic and pedestrians Position vehicle two-three feet from the parked cars Stop when the driver's body appears to be aligned in the center of the parking space, to check available space and let others know of your intention to park Check rear zone Select a target at a 45-degree angle to the left in preparation for backing to the right Creep and turn the wheel fast toward the target Use the least amount of space to get on target Before straightening tires, look over right shoulder to check alignment into space Shift to reverse when aligned to the space and tires are straight Back to the rear pivot point then use hand-over-hand to steer through pivot point The pivot point is when the corner of the parked car is in the rear window's blind spot This is the position to begin turning the steering wheel to back into the space Creep and turn the wheel quickly and fully to the right Creep back slowly and straighten the vehicle in the parking space Check rear bumper location using rear reference point by looking over the left shoulder Shift into "Park" and set the parking brake 	T8-27

Resources



Backing Into Perpendicular Parking

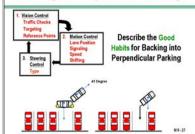
ADVANTAGES

- It is easier to get in and out of tight parking spaces
- It takes less time to park and pull out of the space
- · Provides a better view when leaving the space
- · Avoids backing out into traffic
- · More likely to be let into the traffic flow when exiting
- Reduced risk of hitting something or being hit
- · Gives the best control and less stress



MB - 26

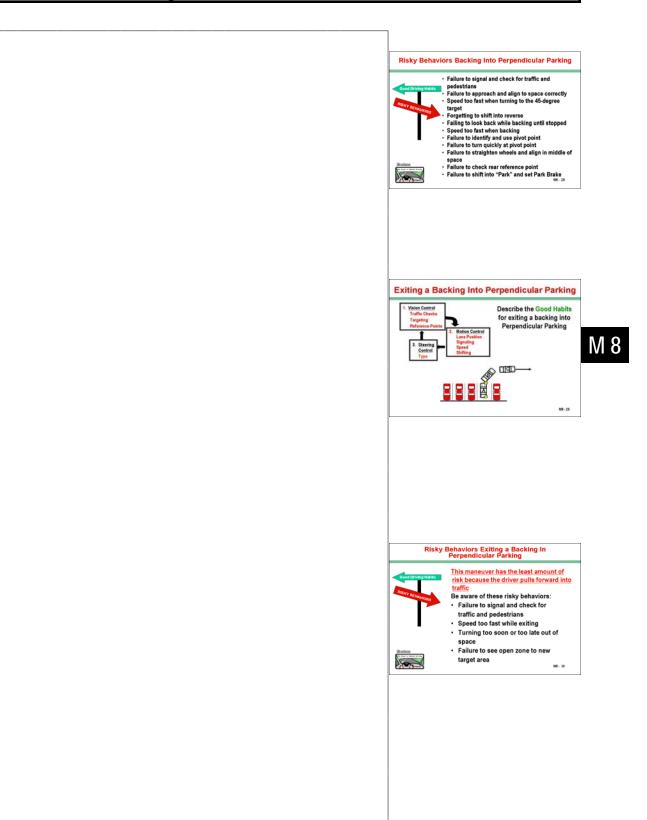
Backing Into Perpendicular Parking



Instructional Topic	Content	Slide
Risky Behaviors When Backing into a Perpendicular Parking Space	Risky behaviors include: Failure to signal and check for traffic and pedestrians Failure to approach and align to space correctly Speed too fast when turning to the 45-degree target Forgetting to shift into reverse Failing to look back while backing until stopped Speeding when backing Failure to identify and use pivot point Failure to turn quickly at pivot point Failure to straighten wheels and align in middle of space Failure to check rear reference point Failure to shift into "Park" Failure to set parking brake	T8-28
◆ Good Habits Exiting Backing in Perpendicular Parking	 Good exiting habits include: Search for traffic and pedestrians Communicate with other drivers by signaling Shift to Drive Release parking brake Creep forward checking traffic in both directions See past the front bumpers of the vehicles on either side Before turning, select a new target Gradually accelerate to the target, check turn signal has cancelled Check rear zone This maneuver has the least amount of risk because the driver pulls forward into traffic when exiting a parking space 	T8-29
Risky Behaviors Exiting a Backing into Perpendicular Parking	 Risky behaviors include: Failure to signal and check for traffic and pedestrians Speed too fast while exiting Turning too soon or too late out of space Failure to see open zone to new target area 	

Resources





Instructional Topic Content Slide Introduce, model, practice, and discuss **PARALLEL** Parallel parking is usually along the side of a street between two other **PARKING** vehicles Good steering, vision, and speed control skills are essential To parallel park, a space at least five-six feet longer than the length of the vehicle is needed ... Most marked parking spaces are 22 feet long Good habits using vision, motion, and steering control include: Good Habits T8-31 Check for traffic and pedestrians for Entering **Parallel** Communicate intentions by signaling at least 100 feet before and tapping brakes **Parking** Check rearview mirror Pause when the vehicle is even with the space to check available space and to let drivers behind know of intention to park in the space Position vehicle 2-3 feet beside the vehicle in front of the parking space Use reference points to line up back bumpers Shift to reverse Check all zones, look back, creep and turn wheel fully toward the curb using hand-over-hand steering Check front zones frequently Stop when the vehicle is at a 45-degree angle; see the back of the passenger side seat even with the rear bumper of the front vehicle (look in outside mirror to see corner of parking space) Continue backing slowly, straighten tires quickly When the front bumper is even with the front vehicle's back bumper (the front corner post covers the left rear corner of the vehicle ahead), turn wheels sharply toward the street When parallel to the curb, straighten wheels, center in space Park within 18 inches of curb or edge of roadway Shift into "Park" and set parking brake

Resources



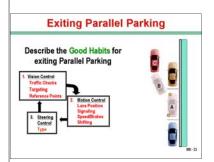


Instructional Topic	Content	Slide
Risky Behavior When Entering Parallel Parking	 Risky behaviors include: Failure to check rearview mirror for traffic to the rear Failure to signal Failure to pause beside parallel parking space (chance to double check available size (space) and communicate to traffic behind, intention to parallel park Failure to align rear bumpers Stops too close or too far away from the vehicle in front of the space Forgets to shift to reverse Failure to obtain a 45-degree angle Failure to check outside mirror Failure to look back while backing Looks over wrong shoulder while backing Speed too fast while backing Failure to turn wheel fully while backing into space Failure to center vehicle into space Failure to straighten wheels Failure to shift into "Park" and set parking brake 	T8-32
Good Habits Exiting Parallel Parking	Exiting requires similar behaviors as a lane change Good habits include: Shift to reverse and back to the rear of parking space Shift to drive Check traffic to the front, sides, rear, select a safe gap and open path of travel Signal the intention to leave the space Check and confirm the blind spot is clear Watch left rear bumper of vehicle in front Select a target and enter the new lane Release the turn signal lever Adjust speed to traffic Get an update on the rear zone	T8-33
Risky Behavior Exiting Parallel Parking	Risky behaviors include: Failure to signal Forgets to shift to REVERSE, then DRIVE Failure to check blind area Forgets to release parking brake Selects wrong gear or forgets to shift to proper gear Failure to clear vehicle parked in front or back Speed too fast while exiting	T8-34

Resources









Instructional Topic	Content	Slide
CURB OR STREET PARKING	Introduce, model, practice, and discuss This parking maneuver is required on the Montana skills test for a driver's license This may require a parallel parking maneuver or approaching the curb and	
Good Habits for Curb or Street Park	 Good habits using vision, motion, and steering control include: Search for traffic and pedestrians Check for vehicle clearance in front Communicate with other drivers by signaling at least 100 feet prior to the planned maneuver Tap the brakes to indicate the vehicle is stopping Check blind spot and rear zone Signal right (or left) Control speed Use reference points to position vehicle within 18 inches of the curb Stop and shift to park Set the parking brake Exit the vehicle when traffic is clear 	T8-35
Risky Behaviors When Entering a Curb or Street Park	 Risky behaviors include: Failure to see other traffic or pedestrians Failure to signal Failure to communicate intention to park Failure to judge sufficient space for the vehicle Parking too far from the curb line Failure to shift to park and set parking brake Failure to check for traffic before exiting 	T8-36
◆ Good Habits When Exiting a Curb or Street Park	This maneuver is similar to a lane change Review procedures for parking on the left and right side of the street Good habits include: Search for traffic and pedestrians Look for open line of sight and path of travel to the front and rear Check blind spot Communicate with others by signaling five seconds before moving See open front and rear zones Shift to "Drive" if needed and release parking brake Look toward intended target area Check space for front vehicle swing	T8-37

Resources





M 8

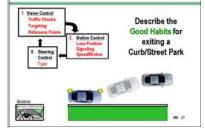
Risky Behaviors Entering Curb/Street Parking



- Failure to see other traffic or pedestrians
- Failure to signal
- Failure to communicate intention
- to park
 Failure to judge sufficient space
- for the vehicle
 Parking too far from the curb line
- Failure to shift to park and set the parking brake

the parking brake

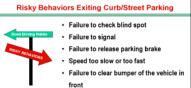
Exiting Curb/Street Parking



Instructional Topic	Content	Slide
◆ Good Habits When Exiting a Curb or Street Park (Cont.)	 Check blind spot Turn wheels all the way to the left/right while creeping forward Check front end swing for front bumper clearance (front right corner post covers left rear corner of vehicle in front) Check blind spot again Smooth entry into new POT Cancel signal Accelerate smoothly and check rear zone 	T8-38
Risky Behaviors When Exiting a Curb or Street Park	Risky behaviors include: Failure to check blind spot Failure to signal Failure to release parking brake Speed too slow or too fast Failure to clear bumper of the vehicle in front Failure to clear vehicle to the rear Failure to target into new POT Failure to check rear zone	
HILL PARKING	Introduce, model, practice, and discuss To keep the vehicle from rolling into traffic when parked on a hill the wheels must be turned and the parking brake must be set	
◆ Good Habits When Parking Uphill With a Curb	Uphill and downhill parking require turning the wheels to help keep the vehicle from moving or rolling into traffic once the vehicle has been secured and exited Good habits using vision, motion, and steering control include: Signal Check for traffic and pedestrians Position vehicle close to curb (use personal reference point) Before stopping, turn wheels sharply left Shift to neutral, allow vehicle to creep back slowly until the right front tire touches the curb Shift to "Park" (or first gear if manual transmission) Set the parking brake	T8-39
Risky Behaviors When Parking Uphill With a Curb	 Risky behaviors include: Forgets to signal Failure to check for traffic, pedestrians Positions vehicle too far from the curb Turns wheels in wrong direction or fails to turn the wheels Turns wheel sharply after stopping, resulting in "dry steering" which is hard on the tires Failure to shift to neutral and back to the curb Forgets to set the parking brake 	T8-40

Resources







Failure to clear vehicle to the rear

Failure to target into new POT
 Failure to check rear zone

M 8





Instructional Topic	Content	Slide
Good Habits When Exiting Uphill Parking With a Curb	If the hill is steep, it may be necessary to hold the vehicle in place with the brake while preparing to leave the parking space Good habits using vision, motion, and steering control include: Recognize wheels are turned Search for pedestrians Look for clear path of travel Signal for five seconds Check blind spots Keep parking brake engaged Shift to drive Release foot brake (be sure parking brake holds) Remember wheels are turned left against the curb Press accelerator slightly Release parking brake as the accelerator is pressed Increase acceleration as needed to target area Check rear zone	T8-41
Risky Behaviors When Exiting Uphill Parking	Risky behaviors include: Forgets wheels are turned into curb Failure to search for pedestrians and traffic Failure to signal Failure to keep parking brake engaged until safe to release Failure to use the foot brake Insufficient acceleration Failure to see open front/side zones Failure to check rear zone	T8-42
Good Habits for Parking Uphill Without a Curb	 Good habits using vision, motion, and steering control include: Check for traffic and pedestrians Signal Pull as far off the roadway as possible Before stopping, turn wheels sharply right Shift to "Park" (or first gear if manual) Set the parking brake 	T8-43
Risky Behaviors When Parking Uphill Without a Curb	 Risky behaviors include: Failure to check for traffic and pedestrians Failure to signal Vehicle not moved out of the lane of moving traffic Forgetting to turn wheels sharply right Forgetting to shift to "Park" and set the parking brake 	T8-44

Resources





M 8

Risky Behaviors Exiting Uphill Parking with a Curb



- Forgets wheels are turned into curb · Failure to check for traffic and
- pedestrians
- Failure to signal
- Failure to keep the parking brake
- engaged until it is safe to release Forgets to use the foot brake
- Insufficient acceleration
- Failure to see open front and side zones
 Forgets to check rear zone

Parking Uphill without a Curb



Risky Behaviors Parking Uphill without a Curb



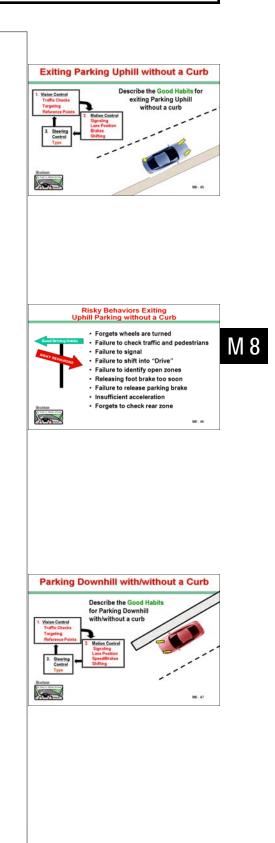
- Forgetting to check for traffic and pedestrians
- Forgetting to signal
- · Leaving vehicle parked in lane of traffic
- · Forgetting to turn wheels sharply right
- · Forgetting to shift to "Park" and set the parking brake



Instructional Topic	Content	Slide
Good Habits When Exiting Uphill Parking Without a Curb	 Good habits include: When leaving the parking space, let the vehicle creep back while straightening the wheels Search for pedestrians and traffic Signal for five seconds Shift to "Drive" See open front and rear zones Release foot brake (be sure parking brake holds) Press accelerator slightly Release parking brake as the accelerator is pressed Increase acceleration as needed toward target area Check rear zone 	T8-45
Risky Behaviors When Exiting Uphill Parking Without a Curb	Risky behaviors include: Forgets wheels are turned Failure to check for traffic and pedestrians Failure to signal Forgets to shift into "Drive" Failure to identify open zones Releasing foot brake prematurely Forgets to release the parking brake Insufficient acceleration Forgets to check rear zone	T8-46
 ◆ Good Habits for Downhill Parking ─With a Curb ─Without a Curb 	 Use the same procedure for parking downhill with and without a curb Good habits using vision, motion, and steering control include: Check for traffic and pedestrians Signal Position vehicle close to curb and stop (use personal reference point) Let the vehicle creep forward while turning the wheel sharply to the right, letting the wheel gently touch the curb Shift to park Set the parking brake 	T8-47

Resources

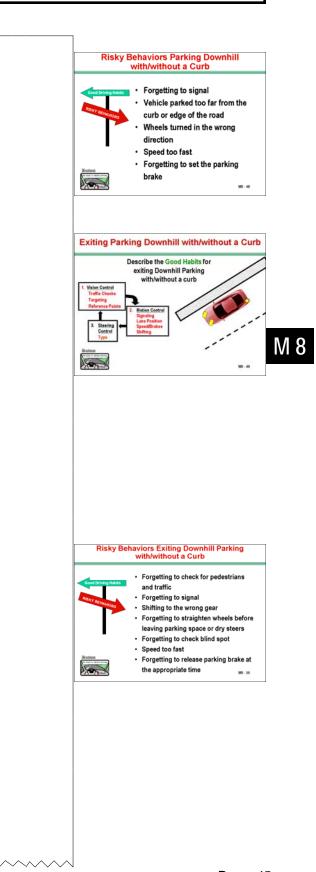




Instructional		
Topic	Content	Slide
Risky Behaviors When Parking Downhill With and Without a Curb	Risky behaviors include: Failure to signal Positions vehicle too far from the curb or edge of the road Wheels turned in wrong direction or not turned Speed too fast Forgets to shift to Park Failure to set parking brake	T8-48
Good Habits for Exiting Downhill Parking With and Without a Curb	 Good habits include: When leaving the parking space, be sure the downhill traffic is not traveling faster than it appears Search for pedestrians and traffic Signal for five seconds If the hill is steep, it may be necessary to hold the vehicle in place with the brake while preparing to leave the parking space Remember the wheels are turned and touching the curb Back a short distance while straightening the wheels Check rearview mirrors and make head check See open front, side, and rear zones Shift to drive Release foot brake Press accelerator lightly Release parking brake as vehicle starts to move forward into lane Check rear zone 	T8-49
Risky Behaviors When Exiting Parking Downhill With and With- Out a Curb	 Risky behaviors include: Forgets to check for pedestrians and traffic Failure to signal Shifts to wrong gear Failure to straighten wheels before leaving parking space or dry steers Failure to check blind spot Speed too fast Failure to release parking brake at appropriate time 	T8-50

Resources





Instructional Topic	Content	Slide
ADDITIONAL PARKING STRATEGIES AND LOCATIONS	Introduce, model, practice, and discuss Many crashes occur in parking lots Developing the good habits for these different locations can reduce the chances of being involved in a parking lot crash	
◆ Parking Lot Strategies	Drivers often fail to stay within lanes in a parking lot and the risk of a collision is high when the parking lot is busy with traffic and pedestrians Good habits include: Obey speed limits Follow the directions of the signs and markings Do not drive diagonally across parking lot lane markings Be alert for pedestrians, bicyclists, rollerbladers and skateboarders Avoid tight parking spaces Avoid competing for a parking space Pull into the space far enough that the front and rear of the vehicle are not in the flow of traffic Position the vehicle properly in the space Secure the vehicle, locking valuables in the trunk Secure parking brake Search all directions when exiting the parking space Watch for others as drivers backing may not see vehicles to the rear	T8-51
Risky Behaviors in Parking Lots	 Risky behaviors include: Speeding Driving against traffic flow Failure to see pedestrians, rollerbladers, skateboarders Parking very close to other vehicles Leaving valuables where others can see them Failure to secure the vehicle Failure to search before moving the vehicle Failure to see other drivers 	
◆ Parking Garage Strategies	Parking garages may be enclosed, under ground, or multi-floor without full walls Visibility may be limited due to darkened conditions It is often harder for drivers to see each other Pillars can create large blind spots	T8-52

Resources



Parking Lot Strategies

- Obey speed limits
 Follow the directions of the signs and markings
 Do not drive algonality across parking lot tane markings
 Be alert for pedestrians, bicyclists, roller-bladers and skateboarders
 Avoid bight parking spaces
 Avoid compessing for a parking space



Parking Garage Strategies

- Watch for backup lights on other vehicles
 Observe and follow all signs
 Stay to the right
 Use headlights in dark garages
 Be aware of people in and around the



When leaving the parking garage be aware -approach the vehicle with key in hand, look around and in the vehicle for unwanted passengers
 Drive slowly and watch for pedestrians

Instructional Topic	Content	Slide
◆ Garage Strategies (Cont.)	 Good habits include: Watch for backup lights on other vehicles Observe and follow all signs Stay to the right Use headlights in dark garages Be aware of people in and around the garage When leaving the parking garage be aware - approach the vehicle with key in hand, look around and in the vehicle for unwanted passengers Drive slowly and watch for pedestrians 	
Risky Behaviors When Using Public Garage Parking	Risky behaviors include: Failure to see other vehicles backing out Failure to be aware when approaching or leaving the vehicle Excessive speed Failure to recognize line of sight restrictions caused by the building or vehicles Failure to use headlights Failure to see signs and marking	
◆ Airport Parking Strategies	Parking at airport terminal buildings is usually not allowed, parking is for temporary drop off and pick up only A vehicle may be towed if the vehicle is left unattended at a terminal When parking, use short term, long term, or metered parking Place the parking receipt in a secure location inside the vehicle	T8-53 T8-54
◆ Handicapped Parking	 The handicapped parking symbol indicates parking spaces are reserved for a handicapped person Vehicles displaying this symbol on their license plate or a special card in or around the dashboard may park in handicapped spaces Non-handicapped drivers are prohibited from parking in handicapped parking areas and may be fined (\$100) for violations A handicapped person may park vehicles displaying the handicapped symbol in public parking spaces without paying and the time is unlimited 	T8 -55
ASSIGNMENT		
ASSESSMENT		

Student Learning Activities Resources



Parking Garage Risky Behaviors



- · Failure to see other vehicles backing out
- Failure to be aware when approaching or leaving the vehicle
- Excessive speed
- Failure to recognize line of sight restrictions caused by the building or vehicles
- · Forgetting to use headlight
- · Failure to see signs, marking



Airport Parking Strategies

- Parking at most airport terminal buildings is usually not allowed, parking is for temporary drop off and pick up passengers only
 A vehicle may be towed if the vehicle is left unattended at a terminal
 Decide if you need short term, long term, or metered parking
 Place the parking receipt in a secure location inside the vehicle





